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Olin CHEMICALS
P.O. BOX 248, LOWER RIVER ROAD, CHARLESTON, TN 37310-0248
PHONE: (615) 336-4000

February 7, 1992

VIA FAX

Cheryl W. Smith
Senior Remedial Project Manager
United States Environmental Protection Agency
345 Courtland Street Northeast
Atlanta, Georgia 30365

Re: Preliminary Response to Your January 30 Letter
Olin Chemicals/McIntosh Plant Site
McIntosh, Alabama

Dear Ms. Smith:

Attached is our preliminary response to your letter of January 30, 1992, which conveyed EPA's comments on the Source Evaluation Technical Memorandum submitted in November 1991. Per our conversation of February 6, 1992, we will meet Tuesday, February 18, 1992, at 10:00am in your offices, to discuss future sampling work in OU-1. At that meeting Olin will present our thoughts regarding the sampling plan, and will follow-up that meeting with a plan submittal for approval. This letter is intended to provide our general response to EPA's comments for your use in planning for the February 18 meeting.

Please let me know if you have any questions regarding this letter or any of the work in progress at McIntosh, Alabama.

Sincerely,

OLIN CORPORATION

J. C. Brown
Manager, Environmental Technology

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Attachment

cc: W. A. Beal
D. E. Cooper (2)
W. J. Derocher
M. L. Fries
W. G. McGlasson
J. L. McIntosh
T. B. Odom
R. A. Pettigrew

Response to EPA Technical Review Comments[1]
Source Evaluation Technical Memorandum
Olin Corporation/McIntosh Plant

General Comments

1. Demonstrate that the presence of mercury throughout the soil column is slowly being removed by the corrective action wells.

   We agree that this is a necessary element of Olin's work at McIntosh. As EPA has noted, the key word here is "slowly." The modeling conducted under the RCRA Post-closure Operating Permit predicts that clean-up will take 25 to 27 years. This means it will be sometime in the future before Olin can make this demonstration.

2. Demonstrate whether or not the Old Plant (CPC) Landfill area is a continuing source of mercury contaminated groundwater and organic compounds.

   We agree that an appropriate sampling and analysis needs to focus on this unit.

3. Determine the source of volatile concentrations measured in monitoring well PL-10S.

   Olin agrees that the volatile concentrations in this well require further examination as to source and migration.

4. There is a need for delineation of wells corresponding to the specific Solid Waste Management Unit that they are monitoring.

   Sections 5.1 and 6.1 of the Source Evaluation Technical Memorandum (SETM) present a general grouping of wells by SWMU and area. Given the close spacing between some SWMUs and the spacing of perimeter wells, it is inappropriate to assign wells that were installed to collect data for the sitewide program to certain SWMUs. We can discuss further on February 18 how EPA believes the general grouping referred to above could be refined.

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[1] *EPA comment is noted in normal type, followed by Olin response in bold type.*

Specific Comments

1. Page 6: The current list of Solid Waste Management Units (SWMUs) identified in the Administrative Order on Consent (AOC) is currently inconsistent with the results from the RCRA Facility Assessment (RFA) dated August 19, 1991. The additional SWMUs identified in the RFA will need further evaluations. Confirmatory sampling for both groundwater and soils will have to be performed on those areas that EPA feels have not been adequately addressed.

   Olin recognizes that the list of SWMUs in the Order must be amended based on the RFA. We received today EPA's response to Olin's comments on the draft RFA, which indicate that the agreements on which SWMUs need to be further addressed will be made under the RI/FS. Olin agrees that this is the best way to proceed to insure the RFA results and the work under the Order is consistent.

2. Page 24: Confirmatory sampling will be required on the ash used as fill material at the Hexachlorobenzene Spoil Area (Hex Spoil Area). 40 CFR 257, Subtitle D disallows the use of solid waste materials as fill material. In addition, the Toxicity Characteristic Leaching Procedure (TCLP) only determines whether or not a material should be handled as a hazardous waste. The Hex Spoil Area must be tested using the total constituent list to adequately determine if the ash material poses a threat to human health and/or the environment.

   Our understanding is that Alabama has the authority for Subtitle D implementation. We believe you are aware that Alabama approved the use of boiler ash for fill in the Hexachlorobenzene Spoil Area. We did analyze the ash on a total basis (as well as a TCLP basis). We would like to discuss this further on February 18.

3. Section 4.2: The isoconcentration maps in Appendix D and Appendix E are very difficult to interpret. A facility overlay should be incorporated into the isoconcentration maps to determine the estimated extent of contaminates as it relates to the facility boundary, corrective action wells, SWMUs, etc.

   We will provide the overlays. However, as emphasized on page 38 of the SETM, computer generated plots were used for the data analysis to obtain an objective depiction of trends. The computer calculations will extrapolate contours of concentrations beyond the limits of the data and close contours around single data points. Therefore, the isoconcentration maps are appropriate for the purpose of the SETM: to evaluate trends. They are inappropriate for estimating the extent of contamination, especially near widely-spaced data points, at low concentrations, and beyond the limits of the data, i.e., offsite.

   The isoconcentration diagrams do not completely track the extent of contamination. The extent of contamination must be completely identified even if it means going outside of the current facility's boundary limits.

   Olin understands that the Order and Work Plan require us to determine the extent of contamination and that the determination is not limited to facility boundaries. As noted in the response to 3 above, the isoconcentration diagrams should not be used to track the extent of contamination. We intend to use the residential well data as the initial indication of the need to investigate further whether offsite migration has occurred.

4. Table 3: A determination must be made as to the reliability of the current well system since these wells will be used in future sampling.

   We believe the well system to be reliable, and agree that it must be so. We would like to discuss on February 18 EPA's ideas as to what information would constitute an adequate determination.

5. Figures 7 - 29: The time vs. concentration analysis is not conclusive. The overall trend of the groundwater contaminant flow is unclear from this analysis. The adequacy of the current groundwater extraction system is inconclusive and it seems that this system is not sufficiently capturing the contaminant plume(s).

   Olin firmly believes the current groundwater extraction system is capturing the contaminant plumes. The time vs. concentration analysis was not intended to assess the adequacy of the extraction system, but rather was intended to identify whether SWMUs or AOCs associated with certain monitor wells were acting as continuing sources of contamination (SETM, page 3). The adequacy of the extraction system is assessed in the Semi-annual reports submitted to EPA under the Post-closure Operating Permit.

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February 7, 1992